

### PATENT COOPERATION TREATY

#### **PCT**

#### **NOTIFICATION OF ELECTION**

(PCT Rule 61.2)

#### From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year)

07 March 2001 (07.03.01)

International application No.
PCT/EP00/05980

ETATS-UNIS
in

Applicant's or agent
LP 1852 PCR

in its capacity as elected Office

Applicant's or agent's file reference

International filing date (day/month/year)
27 June 2000 (27.06.00)

Priority date (day/month/year)
29 June 1999 (29.06.99)

**Applicant** 

BILANDŽIC, Genoveva et al

1.	The designated Office is hereby notified of its election made:
	X in the demand filed with the International Preliminary Examining Authority on:
	17 January 2001 (17.01.01)
	in a notice effecting later election filed with the International Bureau on:
2.	The election X was
	was not
	made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland **Authorized officer** 

Olivia TEFY

Facsimile No.: (41-22) 740.14.35

Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TRLATY

	From t	he INTERNATION	ONAL BL	JREAU
PCT	To:			
NOTIFICATION OF THE RECORDING OF A CHANGE  (PCT Rule 92bis.1 and Administrative Instructions, Section 422)  Date of mailing (day/month/year)	Lon: P.O.	GLER, Norbert, za AG Box 4002 Basel SSE	Hermanı	n
01 October 2001 (01.10.01)				
Applicant's or agent's file reference LP 1852 PCR		IMPORTAN	NT NOTIF	FICATION
International application No. PCT/EP00/05980	1	onal filing date (day June 2000 (27.0	•	ar)
The following indications appeared on record concerning:      X the applicant the inventor	the ager	nt tl	he commo	n representative
Name and Address  ALUSUISSE MARTINSWERK GMBH KÖlner Strasse 110 D-50127 Bergheim		State of National DE Telephone No.	lity	State of Residence DE
Germany		Facsimile No.		
	<u></u>	Teleprinter No.,		
2. The International Bureau hereby notifies the applicant that to the person X the name the add		the nationality	y [	the residence
Name and Address  MARTINSWERK GMBH  Kölner Strasse 110 D-50127 Bergheim		State of National DE Telephone No.	ity	State of Residence DE
Germany		Facsimile No.	- "	
		Teleprinter No.		
3. Further observations, if necessary:				
4. A copy of this notification has been sent to:			<del></del>	
X the receiving Office		the designated	d Offices co	encerned
<ul> <li>the International Searching Authority</li> <li>the International Preliminary Examining Authority</li> </ul>		the elected Off	fices conce	rned
The International Bureau of WIPO 34, chemin des Colombettes	Authorized o		nique DE	IMAS
1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Telephone N	No.: (41-22) 338.83.		LIVIAG

## PATENT COOPERATION TREATY

10/019022

507	From t	he INTERNATIONAL	BUREAU
PCT	To:		
NOTIFICATION OF THE RECORDING OF A CHANGE  (PCT Rule 92bis.1 and Administrative Instructions, Section 422)  Date of mailing (day/month/year) 30 January 2002 (30.01.02)	Lon: P.O.	GLER, Norbert, Herma za AG Box 1002 Basel SSE	inn
Applicant's or agent's file reference LP 1852 PCR		IMPORTANT NO	TIFICATION
International application No. PCT/EP00/05980		nal filing date (day/month/ une 2000 (27.06.00)	year)
The following indications appeared on record concerning:      X the applicant	the ager	t the comm	non representative
Name and Address  MARTINSWERK GMBH Kölner Strasse 110		State of Nationality DE	State of Residence DE
D-50127 Bergheim Germany		Telephone No.  Facsimile No.	
		Teleprinter No.	
2. The International Bureau hereby notifies the applicant that  X the person X the name X the ad		change has been recorded  X the nationality	concerning: X the residence
Name and Address		State of Nationality	State of Residence
ALBEMARLE CORPORATION 451 Florida Street	ļ	US Telephone No.	US
Baton Rouge, LA 70801-1765 United States of America		relephone IVO.	
		Facsimile No.	
		Teleprinter No.	
3. Further observations, if necessary:			
4. A copy of this notification has been sent to:			
X the receiving Office	Γ	the designated Offices	concerned
the International Searching Authority	र्	the elected Offices cond	cerned
the International Preliminary Examining Authority		other:	
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized o	fficer Dominique D	ELMAS
acsimile No.: (41-22) 740.14.35	Telephone N	o.: (41-22) 338.83.38	



- -an. 2001

From the INTERNATIONAL BUREAU

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

RIEGLER, Norbert, Hermann Lonza AG P.O. Box CH-4002 Basel SUISSE

Date of mailing (day/month/year)

04 January 2001 (04.01.01)

Applicant's or agent's file reference

LP 1852 PCR

**IMPORTANT NOTICE** 

International application No. PCT/EP00/05980

International filing date (day/month/year) 27 June 2000 (27.06.00)

Priority date (day/month/year) 29 June 1999 (29.06.99)

**Applicant** 

ALUSUISSE MARTINSWERK GMBH et al

 Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice: AG,AU,BZ,DZ,KP,KR,MZ,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CN,CR,CU,CZ,DE,DK,DM,EA,EE,EP,ES,FI,GB,GD,GE,GH,GM,HR,HU,ID,IL,IN,IS,JP,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MN,MW,MX,NO,NZ,OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

 Enclosed with this Notice is a copy of the international application as published by the International Bureau on 04 January 2001 (04.01.01) under No. WO 01/00529

### REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

## REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the **national phase**, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

J. Zahra

Telephone No. (41-22) 338.83.38

Form PCT/IB/308 (July 1996)

Facsimile No. (41-22) 740.14.35

#### Continuation of Form PCT/IB/308

# NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

Date of mailing (day/month/year) 04 January 2001 (04.01.01)	IMPORTANT NOTICE
Applicant's or agent's file reference LP 1852 PCR	International application No. PCT/EP00/05980

The applicant is hereby notified that, at the time of establishment of this Notice, the time limit under Rule 46.1 for making amendments under Article 19 has not yet expired and the International Bureau had received neither such amendments nor a declaration that the applicant does not wish to make amendments.



EINGEGAMREN

.15. März 3001

#### PCT

#### **INFORMATION CONCERNING ELECTED** OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

RIEGLER, Norbert, Hermann Lonza AG P.O. Box CH-4002 Basel SUISSE

Date of mailing (day/month/year)

07 March 2001 (07.03.01)

Applicant's or agent's file reference

LP 1852 PCR

IMPORTANT INFORMATION

International application No.

PCT/EP00/05980

International filing date (day/month/year)

Priority date (day/month/year) 29 June 1999 (29.06.99)

27 June 2000 (27.06.00)

**Applicant** 

ALUSUISSE MARTINSWERK GMBH et al

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

AP :GH,GM,KE,LS,MW,MZ,SD,SL,SZ,TZ,UG,ZW

EP:AT,BE,CH,CY,DE,DK,ES,FI,FR,GB,GR,IE,IT,LU,MC,NL,PT,SE

National :AU,BG,CA,CN,CZ,DE,IL,JP,KP,KR,MN,NO,NZ,PL,RO,RU,SE,SK,US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

EA:AM,AZ,BY,KG,KZ,MD,RU,TJ,TM

OA:BF,BJ,CF,CG,CI,CM,GA,GN,GW,ML,MR,NE,SN,TD,TG

National :AE,AG,AL,AM,AT,AZ,BA,BB,BR,BY,BZ,CH,CR,CU,DK,DM,DZ,EE,ES,FI,GB,

GD,GE,GH,GM,HR,HU,ID,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MW,

MX,MZ,PT,SD,SG,SI,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW

The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 39(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 36(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer:

Olivia TEFY

Telephone No. (41-22) 338.83.38



#### From the INTERNATIONAL BUREAU **PCT** NOTIFICATION OF THE RECORDING RIEGLER, Norbert, Hermann EINGEGANGEN OF A CHANGE (PCT Rule 92bis.1 and P.O. Box 10 Okt. 2001 Administrative Instructions, Section 422) CH-4002 Basel Erl. WR SUISSE Date of mailing (day/month/year) 01 October 2001 (01.10.01) Applicant's or agent's file reference IMPORTANT NOTIFICATION LP 1852 PCR International application No. International filing date (day/month/year) PCT/EP00/05980 27 June 2000 (27.06.00) 1. The following indications appeared on record concerning: the applicant the inventor the agent the common representative Name and Address State of Nationality State of Residence ALUSUISSE MARTINSWERK GMBH DE DE Kölner Strasse 110 D-50127 Bergheim Telephone No. Germany Facsimile No. Teleprinter No. 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: the person X the name the address the nationality the residence Name and Address State of Nationality State of Residence MARTINSWERK GMBH DE DE Kölner Strasse 110 D-50127 Bergheim Telephone No. Germany Facsimile No. Teleprinter No. 3. Further observations, if necessary: 4. A copy of this notification has been sent to: X the receiving Office the designated Offices concerned the International Searching Authority the elected Offices concerned the International Preliminary Examining Authority other: Authorized officer The International Bureau of WIPO 34, chemin des Colombettes Dominidue DELMAS 1211 Geneva 20, Switzerland

Telephone No.: (41-22) 338.83.38

Form PCT/IB/306 (March 1994)

Facsimile No.: (41-22) 740.14.35

**PCT** 

WIFO PCT

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant'	s or a	gent's file reference			
			FOR FURTHER ACTION	See Notifica Preliminary	ation of Transmittal of International Examination Report (Form PCT/IPEA/416)
Internation	nal ap	plication No.	International filing date (day/month	n/year)	Priority date (day/month/year)
PCT/EP	International application No. PCT/EP00/05980  International filing date (day/month/year) 27/06/2000  Priority date (day/month/year) 29/06/1999  International Patent Classification (IPC) or national classification and IPC  C01F7/14  Applicant  ALUSUISSE MARTINSWERK GMBH  I. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.  2. This REPORT consists of a total of 4 sheets, including this cover sheet.  In this report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of 2 sheets.				
Internation C01F7/	nal Pa I 4	tent Classification (IPC) or na	tional classification and IPC	<b>!</b>	
Applicant	_				
ALUSUI	SSE	MARTINSWERK GMBI	Н		
1. This and i	interr s trar	national preliminary examinsmitted to the applicant a	nation report has been prepared ccording to Article 36.	by this Inter	national Preliminary Examining Authority
2. This	REPO	ORT consists of a total of	4 sheets, including this cover sh	eet.	
. ~	CCIT	anichaea ana are me basi	is for this report and/or sheets co	ontaining rect	ifications made before this Aught with
These	e ann	exes consist of a total of 2	2 sheets.		
3. This r	eport	contains indications relati	ing to the following items:		
I	$\boxtimes$	Basis of the report			
Н					
Ш		Non-establishment of op	inion with regard to novelty, inve	ntive step an	nd industrial applicability
IV		Lack of unity of invention	ו		applicasility
V	⊠	Reasoned statement und citations and explanation	der Article 35(2) with regard to no as suporting such statement	ovelty, invent	ive step or industrial applicability;
VI					
		Certain defects in the inte	ernational application		
VIII		Certain observations on t	the international application		
Date of subr	nissio	n of the demand	Date of co	mpletion of this	s report
17/01/200	1		12.10.200	1	
Name and m preliminary e	ailing xamir	address of the international ning authority:	Authorized	officer	PASONES MICE.
<i>)</i> ))	Europ D-802 Tel. +	pean Patent Office 298 Munich 49 89 2399 - 0 Tx: 523656 ej	Grundke	, H	
	Fax: -	+49 89 2399 - 4465		Nn +49 89 23	00 8564

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP00/05980

I. E	3asis	of	the	rep	ort
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-	a	ie receiving Onice in	ments of the international a response to an invitation u o this report since they do r	nder Article 14 arc	referred to in this	roport on "originally Cl. III
	1.	-10	as originally filed			
	С	laims, No.:				
	1-	9	as received on	23/07/2001	with letter of	23/07/2001
2	iai	iguage in which the t	uage, all the elements mar nternational application was available or furnished to this	s filed, unless othe	erwise indicated ur	nder this item.
	_					
		the language of a t	ranslation furnished for the	purposes of the ir	nternational search	ı (under Rule 23.1(b)).
			blication of the internationa			
		the language of a t 55.2 and/or 55.3).	ranslation furnished for the	purposes of interr	national preliminary	y examination (under Rule
3.	Wi	th regard to any <b>nuc</b> l ernational preliminary	leotide and/or amino acid / examination was carried o	sequence disclosout on the basis of	sed in the internation the sequence listing	onal application, the ng:
		contained in the int	ernational application in wri	tten form.		
		filed together with t	he international application	in computer reada	able form.	
		furnished subseque	ently to this Authority in writ	ten form.		<b></b>
		furnished subseque	ently to this Authority in com	puter readable fo	rm.	
		The statement that the international ap	the subsequently furnished plication as filed has been f	written sequence	listing does not go	beyond the disclosure in
		The statement that listing has been furn	the information recorded in nished.	computer readab	le form is identical	to the written sequence
4.	The	amendments have	resulted in the cancellation	of:		
		the description,	pages:			
		the claims,	Nos.:			
		the drawings,	sheets:			
5.		This report has been considered to go be	n established as if (some of yond the disclosure as filed	the amendments (Rule 70.2(c)):	s had not been ma	de, since they have been

### INTERNATIONAL PRELIMINARY **EXAMINATION REPORT**

International application No. PCT/EP00/05980

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

- 6. Additional observations, if necessary:
- V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- 1. Statement

Novelty (N)

Yes:

Claims 1-9

No:

Claims

Inventive step (IS)

Yes:

Claims 1-9

No: Claims

Industrial applicability (IA)

Yes:

Claims 1-9 No: Claims

2. Citations and explanations see separate sheet

# INTERNATIONAL PRELIMINARY International application No. PCT/EP00/05980 EXAMINATION REPORT - SEPARATE SHEET

Item V:

Reference is made to the following document/s/:

D1: A.R. GERSON ET AL.: 'Influence of solution constituents, solution conditioning and seeding on the crystalline phase of aluminium hydroxide using in situ X-ray diffraction' JOURNAL OF CRYSTAL GROWTH, vol. 160, no. 3,4, 1996, pages 346-354, XP002151672

D2: US-A-4 847 064 (PEARSON ALAN) 11 July 1989 (1989-07-11)

Though production of gibbsite type aluminium hydroxides via bayerite crystal seeding is known from documents D1 and D2, the prior art has not recognized the significance of the influence of a selected grain diameter range of the seed crystals in order to improve in aluminium hydroxide the rheological properties when blended with synthetic resins. The present claimed invention achieves this improvement in a novel route, which is not obvious from the cited art.

#### Claims

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- 1. A process for the preparation of gibbsite type aluminium hydroxides, wherein a liquor obtained from the Bayer process is seeded with bayerite crystals having a grain diameter in the 50% range ( $d_{50}$ ) of 1.2  $\mu$ m to 2.2  $\mu$ m.
- 2. The process of claim 1, wherein the molar ratio of Na<sub>2</sub>O to Al<sub>2</sub>O<sub>3</sub> in the Bayer liquor is from 1.4:1 to 1.55:1.
- 3. A process according to any one of claims 1 to 2, wherein the bayerite crystals have a rain diameter in the 10% range  $(d_{10})$  of 0.5 μm to 0.9 μm and in the 90% range  $(d_{20})$  of 3.5 μm to 5.5 μm.
- 4. A process according to any one of claims 1 to 3, wherein the bayerite crystals are added in an amount of 1 g/l to 3 g/l at a liquor temperature of 50 °C to 70 °C.
  - 5. A process according to any one of claims 1 to 4, wherein after seeding the process mixture is stirred under precipitation until the molar ratio of Na<sub>2</sub>O to Al<sub>2</sub>O<sub>3</sub> is in the range of 2.2:1 to 3.5:1.
  - 6. A gibbsite type aluminium hydroxide having a grain diameter in the 50% range (d<sub>50</sub>) of 1.5 μm to 4.5 μm, in the 10% range (d<sub>10</sub>) of 0.4 μm to 2.0 μm and in the 90% range (d<sub>90</sub>) of 3.0 μm to 9.5 μm, a surface area (according to BET) from 1.0 m²/g to 4.0 m²/g and an aspect ratio from 4:1 to 6:1.
  - 7. A mixture of gibbsite type aluminium hydroxides, characterised in that it has a grain diameter in the 50% range of  $(d_{50})$  4 to 20  $\mu$ m and contains a gibbsite type aluminium hydroxide according to claim 6 or a gibbsite type aluminium hydroxide obtained by a process according to any one of claims 1 to 5.

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- 8. A synthetic resin containing a gibbsite type aluminium hydroxide according to claim 6 or obtained by a process according to any one of claims 1 to 5.
- The use of a gibbsite type aluminium hydroxide according to claim 6 or obtained by a
   process according to any one of claims 1 to 5 as a fire retardant additive in synthetic resins.



## **PCT**

#### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification	of Transmittal of International Search Report
LP 1852 PCT	ACTION (Form PCT/ISA/2	220) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/EP 00/05980	27/06/2000	29/06/1999
Applicant		
ALUSUISSE MARTINSWERK GMBI	1	
This International Search Report has been according to Article 18. A copy is being tra	prepared by this International Searching Authors	nority and is transmitted to the applicant
g as a mass to a first to being the	manifect to the international bureau.	
This International Search Report consists		
X It is also accompanied by	a copy of each prior art document cited in this	report.
Basis of the report		
a. With regard to the language, the i	nternational search was carried out on the bas	sis of the international application in the
language in which it was filed, unle	ess otherwise indicated under this item.	are an an analysis and appropriate in the
the international search was Authority (Rule 23.1(b)).	as carried out on the basis of a translation of the	ne international application furnished to this
b. With regard to any nucleotide and	Vor amino acid sequence disclosed in the in	ternational application, the international search
was carried out on the basis of the	sequence listing : nal application in written form.	
	national application in computer readable form	1.
	this Authority in written form.	
	this Authority in computer readble form.	
the statement that the sub- international application as	sequently furnished written sequence listing do filed has been furnished.	pes not go beyond the disclosure in the
the statement that the infor furnished	mation recorded in computer readable form is	identical to the written sequence listing has been
2. Certain claims were foun	d unsearchable (See Box I).	
3. Unity of Invention is lack		
4. With regard to the <b>title</b> ,		
the text is approved as sub	mitted by the applicant	
	ed by this Authority to read as follows:	
	•	
5. With regard to the abstract,		
the text is approved as sub	mitted by the applicant	
the text has been established	ed, according to Rule 38.2(b), by this Authority	as it appears in Box III. The applicant may,
6. The figure of the <b>drawings</b> to be publis	date of mailing of this international search repo	οιι, submit comments to this Authority.
as suggested by the applica		None of the figures.
because the applicant failed		[A] Rone of the figures.
because this figure better c	naracterizes the invention.	

## INT NATIONAL SEARCH REPORT

rernational Application No

CLASSIFICATION OF SUBJECT MATTER A. CLASS C01F7/14 C01F7/02 C08K3/22 C09K21/02 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) C01F C08K C09K Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ, WPI Data, CHEM ABS Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Category 9 Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. χ A.R. GERSON ET AL.: "Influence of 1,9 solution constituents, solution conditioning and seeding on the crystalline phase of aluminium hydroxide using in situ X-ray diffraction" JOURNAL OF CRYSTAL GROWTH, vol. 160, no. 3,4, 1996, pages 346-354. XP002151672 Υ 10,11 page 348; table 2 χ Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents : "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or other means ments, such combination being obvious to a person skilled "P" document published prior to the international filing date but in the art later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 1 November 2000 15/11/2000 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Zalm. W Fax: (+31-70) 340-3016



ternational Application No PCT/EP 00/05980

DATABASE WPI . Section Ch, Week 199737	Relevant to claim No.
	10 11
Derwent Publications Ltd., London, GB; Class A14, AN 1997-399664 XP002151673 & JP 09 176367 A (SUMITOMO CHEM CO LTD), 8 July 1997 (1997-07-08)	10,11
abstract	7,8
SATPATHY B K ET AL: "DEVELOPMENT OF SPECIAL GRADE HYDRATE AND ALUMINA", PROCEEDINGS OF THE TMS ANNUAL MEEETING, US, WARRENDALE, TMS, VOL. MEETING 123, PAGE(S) 147-153 XP000625565 ISBN: 0-87339-264-7 table 3	7,8
US 4 847 064 A (PEARSON ALAN) 11 July 1989 (1989-07-11) column 4, line 23 - line 25; claims	1
EP 0 589 432 A (MARTINSWERK G M B H FUER CHEMI) 30 March 1994 (1994-03-30)	

## INT NATIONAL SEARCH REPORT

information on patent family members

rternational Application No PCT/EP 00/05980

Patent document - cited in search report		Publication date		Patent family member(s)	Publication date
JP 9176367	Α	08-07-1997	NONE		I
US. 4847064	Α	11-07-1989	WO US US	9015777 A 5149520 A 5225229 A	27-12-1990 22-09-1992 06-07-1993
EP 0589432	A	30-03-1994	DE CA DE ES HU JP SK US US	4231874 A 2105956 A 59300505 D 2075750 T 66730 A,B 6199519 A 102093 A 5492542 A 5500480 A	24-03-1994 24-03-1994 28-09-1995 01-10-1995 28-12-1994 19-07-1994 06-04-1994 20-02-1996 19-03-1996